

## Abstract

This invention is directed towards a paint spray gun having a gun body with a male thread and having an air nozzle ring with a female thread which can be screwed onto the male thread of the gun body. The diameter of the thread is between about 30 and about 40 mm. The thread of the invention is a trapezoid thread with a flank angle in the range of about  $\pm 20\%$  of  $30^\circ$ . The thread has a thread height within the range of about  $\pm 20\%$  of 1.1 mm, a root to crest clearance within the range of about  $\pm 20\%$  of 0.1 mm and a flank clearance within the range of about  $\pm 20\%$  of 0.15 mm. The effect of these modifications to a standard trapezoid thread with a flank angle of about  $30^\circ$  is that the thread is optimally adjusted to serve as a thread connecting the body of a paint spray gun and a nozzle ring.